

ABSTRACT

Support for a mixed network environment is provided which can contain multiple isochronous and/or non-isochronous LAN protocols such as Isochronous-Ethernet, Ethernet, isochronous-token ring, token ring, other isochronous-LAN or other LAN Systems. Support for a mixed environment includes a protocol detection mechanism which is embodied in a handshaking scheme. This handshaking scheme determines the signalling capability at the end points of the link and implements the correct protocols. This enables isochronous nodes and hubs to automatically detect the presence of Ethernet, token ring, or other LAN equipment at the other end of the network cable. If this detection occurs, the isochronous LAN equipment will fall-back to a LAN compliant mode of operation. Typically, only the hub will have the capability of operating in different networking modes, such as Ethernet, Token Ring isochronous modes. The hub will listen for some form of identification from the attached nodes as to the type of service to provide—isochnous or non-isochronous; Ethernet, token ring or other LAN service.

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